

REMARKS

Specification

The Examiner has objected to the specification as containing New Matter. Namely, the Examiner states that a prior amendment to the specification introduced new matter for failure to include the phrase “that is doped with a dopant” as would be necessary for the amendment to be supported by the original disclosure. As suggested by the Examiner and indicated above, the specification has been amended accordingly. Therefore, applicants respectfully request removal of objections to the specification.

Rejections Pursuant to 35 USC §103

The Examiner has rejected independent claim 63 as unpatentable over Ito et al. (U.S. Pat. No. 4,661,320) in view of Prieve et al. (U.S. Pat. No. 6,269,680) along with dependent claims 64-70. Namely, the Examiner states that Ito discloses “an optical barrier”. However, as described below, Ito fails to disclose an optical barrier as claimed in independent claim 63.

Claim 63 has been amended to clarify that one embodiment of the of a hydrogen gas detector may include a “heat sensitive optical barrier”. That is, as described throughout the specification, the hydrogen gas detector may be operable by including a barrier responsive to heat and which is disposed between a light/heat source and a detector. Ito, on the other hand discloses no *heat sensitive* optical barrier as a means by which a hydrogen gas detector may operate (emphasis added). In fact, while the Examiner goes on to reference Prieve and state that “any kind of light source could be

used”, Prieve similarly includes no reference to any heat sensitive optical barrier for any purpose.

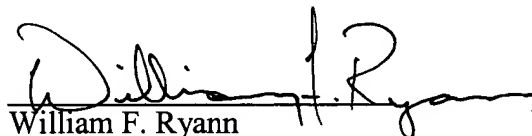
Ito and Prieve fail to disclose any kind of heat sensitive optical barrier. Whether viewed alone or in combination, these references fail to render the claimed embodiment of claim 63, as amended, obvious. Therefore, applicants respectfully request removal of rejections pursuant to Rejections Pursuant to 35 USC §103.

Conclusion

Applicants respectfully submit that claims 30- 45 and 63-70 are in condition for allowance. The Examiner is requested to contact the undersigned attorney at (203) 794-1100 should this be seen as helpful in prosecution of this application.

Please charge any deficiency or credit any overpayment to Deposit Account No. 50-0860.

Respectfully submitted,



William F. Ryann
Registration No. 44,313

Advanced Technology Materials, Inc.
7 Commerce Dr.
Danbury, Ct. 06810
203 794-1100, Ext. 4140
203 797-2544 Fax
Attorney Ref: ATMI-401 RCE